

to forward-looking economic costs. The introduction of competition and new technologies appear to be exacerbating regulatory arbitrage opportunities, which suggests that we need to move quickly to a single cost methodology for setting both access charges and reciprocal compensation rates. To the extent that we need to adopt a uniform methodology other than bill and keep, we believe that, consistent with our decisions in the *Local Competition Proceeding* and the access charge reform proceeding, we should adopt a forward-looking cost methodology. We seek comment on this reasoning. We also seek comment on whether, in order to achieve the benefits of a uniform intercarrier compensation regime, state public utility commissions would need to move intrastate access charges to forward-looking-economic costs.

100. The Commission determined in the *Local Competition Order* that the “pricing standards established by section 252(d)(1) for interconnection and unbundled elements, and by section 252(d)(2) for transport and termination of traffic, are sufficiently similar to permit the use of the same general methodologies for establishing rates under both statutory provisions.”¹⁵⁸ The Commission reasoned that a new entrant might use unbundled network elements as a substitute for transporting traffic under section 252(d)(2), and that “transport of traffic for termination on a competing carrier’s network is, therefore, largely indistinguishable from transport for termination of calls on a carrier’s own network.”¹⁵⁹ The Commission therefore found that the “additional costs” standard for transport and termination permits the use of the forward-looking, economic cost-based (total element long-run incremental cost, or TELRIC) pricing standard that it established for interconnection and unbundled elements.¹⁶⁰

101. We seek comment on this analysis, and specifically ask that parties comment on whether, if the Commission declines to adopt bill and keep, the Commission’s use of the TELRIC cost standard is the most appropriate methodology for establishing “additional costs” under section 252(d)(2).¹⁶¹ What would be the implications of using short-run incremental costs when determining the “additional costs” incurred in terminating calls that originate on another carrier’s network? Do the “additional” costs of terminating traffic differ significantly from the *average* incremental costs calculated under TELRIC? If so, we seek comment on how we should more accurately calculate the “additional costs” of terminating calls. We also ask whether advances in technology have provided carriers with essentially inexhaustible capacity, and whether the “additional costs” of delivering a call that originates on a competing carrier’s network currently approach zero.

102. In the *Local Competition Proceeding*, the Commission concluded that the “incumbent LEC’s transport and termination prices” should be the “presumptive proxy for other

¹⁵⁸ *Local Competition Order*, 11 FCC Rcd. at 16023.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ See, e.g., Joint ILEC *ex parte* in CC Docket No. 99-68 at 12 n.33 (filed Nov. 3, 2000) (arguing that, unlike TELRIC, the “additional costs” statutory standard for calculating reciprocal compensation is a pure incremental cost standard that requires a short-run marginal cost analysis).

telecommunications carriers' additional costs of transport and termination."¹⁶² This rule, however, grew subject to demonstration by a telecommunications carrier that it incurs higher costs than the ILEC to transport and terminate local traffic. The *Local Competition Order* also determined that states could establish transport and termination rates during the arbitration process that varied according to whether the traffic is routed through a tandem switch or directly through an end-office switch.¹⁶³ The Commission reasoned that different rates are justified because the additional costs that a LEC incurs are likely to vary depending on whether the LEC uses both tandem and end-office switching, or end-office switching alone.¹⁶⁴ Moreover, the Commission determined that the ILEC's tandem interconnection rate should be applied as a proxy when interconnecting carriers utilize new switch technologies that serve a geographic area comparable to that served by the ILEC's tandem switch.

103. The presumptive ILEC cost proxy and the tandem-rate criteria have been disputed by carriers. Among carriers who have questioned the accuracy of the presumptive ILEC cost proxy, Verizon argues that, because certain CLECs have installed technology different from that of the ILECs, the CLECs' costs of termination are lower.¹⁶⁵ Sprint PCS, on the other hand, claims that its local-call termination costs exceed the ILEC proxy.¹⁶⁶

104. To assist parties in helping us to explore the broader question of moving to a unified interconnection regime raised in this proceeding, we review the application of the Commission's current orders and rules regarding asymmetric reciprocal compensation for LEC-CMRS interconnection. Under the language of section 252(d)(2)(A) of the Communications Act,¹⁶⁷ CMRS carriers are entitled to the opportunity to demonstrate that their termination costs

¹⁶² *Local Competition Order*, 11 FCC Rcd. at 16040 ¶ 1085. The Commission went on to state:

If a competing local service provider believes that its cost will be greater than that of the incumbent LEC for transport and termination, then it must submit a forward-looking economic cost study to rebut this presumptive symmetrical rate. In that case, we direct state commissions...to depart from symmetrical rates only if they find that the costs of efficiently configured and operated systems are not symmetrical and justify a different compensation rate.

Id.

¹⁶³ *Local Competition Order*, 11 FCC Rcd. at 16042.

¹⁶⁴ *Id.*

¹⁶⁵ Comments of Verizon Communications at 25-27 (in response to Comment Sought on Remand of the Commission's Reciprocal Compensation Declaratory Ruling by the U.S. Court of Appeals for the D.C. Circuit, CC Docket Nos. 96-98, 99-68. *Public Notice*, 15 FCC Rcd. 11311 (2000)); see also *id.*, Declaration of William E. Taylor. at 13-19.

¹⁶⁶ Sprint PCS submitted a cost study purporting to show that a CMRS provider's network components (including mobile telephone exchange, base station controller, base transceiver system, structure and antennae, and spectrum) are traffic-sensitive and should be included in the cost of termination. See *Sprint PCS Study*. *supra* note 31.

¹⁶⁷ The Communications Act permits asymmetric reciprocal compensation. Specifically, section 252(d)(2)(A) states that the terms and conditions of reciprocal compensation will be just and reasonable if "(i) such terms and conditions provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier; (continued...)"

exceed those of the ILECs. The “equivalent facility” language of sections 51.701(c) and (d) of the Commission’s rules was not intended to require that wireless network components be reviewed on the basis of their relationship to wireline network components. Nor, given the language of the statute, was it intended to have the effect of barring a CMRS carrier from receiving compensation for the additional costs that it incurs in terminating traffic on its network if those costs exceed the ILEC’s. Instead, a cost-based approach —ne that looks at whether the particular wireless network components are cost sensitive to increasing call traffic —should be used to identify compensable wireless network components.¹⁶⁸ Thus, if a CMRS carrier can demonstrate that the costs associated with spectrum, cell sites, backhaul links, base station controllers and mobile switching centers vary, to some degree, with the level of traffic that is carried on the wireless network, a CMRS carrier can submit a cost study to justify its claim to asymmetric reciprocal compensation that includes additional traffic sensitive costs associated with those network elements. We note that, under our rules, the CMRS carrier bears the burden of justifying in its analysis precisely what are its additional costs, and demonstrating that its analysis complies with all applicable Commission rules.¹⁶⁹

105. In addition, section 51.711(a)(3) of the Commission’s rules¹⁷⁰ requires only that the comparable geographic area test be met before carriers are entitled to the tandem interconnection rate for local call termination. Although there has been some confusion stemming from additional language in the text of the *Local Competition Order* regarding functional equivalency,¹⁷¹ section 51.711(a)(3) is clear in requiring only a geographic area test. Therefore, we confirm that a carrier demonstrating that its switch serves “a geographic area comparable to that served by the incumbent LEC’s tandem switch” is entitled to the tandem interconnection rate to terminate local telecommunications traffic on its network.¹⁷²

106. Turning to the broader, forward-looking questions, we seek comment first on whether we should eliminate the symmetry presumption. If a party contends that we should eliminate this presumption, then it should explain how regulators should calculate the forward-looking cost of transport and termination for CLECs. In particular, is it possible for states to estimate a single cost of transport and termination for all CLECs, or should we require calculations of individual transport and termination rates for every CLEC? Alternatively, should we provide for calculation of separate rates only where a CLEC uses a different technology, and if so, for which technologies should there be a separate interconnection rate? Similarly, could

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and (ii) such terms and conditions determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls.” 47 U.S.C. § 252 (d)(2)(A).

¹⁶⁸ *Local Competition Order*, 11 FCC Rcd. at 16024-25 ¶¶ 1057; 47 C.F.R. §§ 51.707.51.711.

¹⁶⁹ We note that our rules do not require network elements to be priced on a minutes-of-use basis. Element rates can be structured consistently with the way network-element costs are incurred. For example, the costs of shared facilities may be recovered either through usage-sensitive charges or capacity-based flat-rated charges, if the state commissions find that such rates reflect the way users impose costs. See 47 C.F.R. § 51.507(a), (c).

¹⁷⁰ 37 C.F.R. § 51.711(a)(3)

¹⁷¹ *Local Competition Order*, 11 FCC Rcd. at 16043 ¶¶ 1090.

¹⁷² 47 C.F.R. § 51.711(a)(3).

transport and termination rates be established for CMRS carriers as a group, for categories of CMRS carriers, or on a carrier-by-carrier basis only? If a party suggests the need for a separate interconnection rate for each carrier, we ask it to explain how this position is consistent with the principles of forward-looking cost pricing. We also seek comment on whether adopting asymmetrical transport and termination rates is consistent with the efficient development of competition. Finally, we seek comment on the additional burdens that such a rule change might impose both on parties and on regulators.

107. We seek comment on whether our current tandem-rate rule creates an opportunity for regulatory arbitrage. We also seek comment on whether the rule, or any modification of it, facilitates or distorts the efficient development of competition. In particular, we seek comment on whether elimination of the rule may significantly disadvantage carriers with newer networks having fewer tandems, particularly where traffic exchanged between such networks and the incumbent is balanced. We also seek comment on whether section 51.711(a)(3) should be amended to include the “functional equivalency” concept discussed in the text of the *Local Competition Order*.¹⁷³

108. As previously indicated, IXC’s have argued that, to the extent that access charges exceed economic cost, ILECs have the incentive and ability to discriminate in favor of their long-distance affiliates by engaging in a predatory price squeeze. We seek comment on this argument. Finally, we invite parties to raise any other rate-level issues that they believe the Commission needs to consider in evaluating how it might reform existing CPNP regimes.

b. Rate Structure Issues

109. The Commission has repeatedly recognized that, as a theoretical matter, the traffic-sensitive costs of shared facilities should be recovered through peak-load prices, under which a higher price would be assessed on traffic occurring during the peak period.¹⁷⁴ Because

¹⁷³ We note that, in dealing with the problems presented by ISP-bound traffic, some states have incorporated a functional equivalency test into their interpretations of section 51.711(a)(3). *See* Proceeding on Motion of the Commission to Reexamine Reciprocal Compensation, Case 99-C-0529, Opinion and Order Concerning Reciprocal Compensation, Opinion No. 99-10, at 35-40, 56-58 (New York PSC Aug. 26, 1999) (“*New York PSC Order*”); Texas PUC Remand Comments, attached Proceeding to Examine Reciprocal Compensation Pursuant to Section 252 of the Federal Telecommunications Act of 1996, Docket No. 21982, Arbitration Award at 19-29 (Texas PUC July 12, 2000) (“*Texas PUC Order*”). Both the Texas PUC and New York PSC concluded that large imbalances in traffic flows strongly suggest that a carrier is serving a higher proportion of convergent customers rather than a large distribution of customers similar to those served by an ILEC tandem switch. *New York PSC Order* at 37-38, 54-55; *Texas PUC Order* at 19-29. The New York PSC found that the “costs of serving a small number of large, convergent customers will likely be lower than the costs of serving a mass market,” and it therefore established a rebuttable presumption that a LEC is not providing tandem functionality when the traffic it exchanges exceeds a certain ratio. *New York PSC Order* at 54-58. These interpretations, while inconsistent with our rule, suggest that we should consider whether to amend the rule to give states greater flexibility in applying a tandem interconnection rate to networks using newer, more efficient technologies. Commenters are invited to address this issue in light of our treatment, under section 201 of the Communications Act, of intercarrier compensation related to ISP-bound traffic. *See ISP Intercarrier Compensation Order*, *supra* note 3.

¹⁷⁴ *See, e.g., Local Competition Order*, 11 FCC Rcd. at 15878 ¶¶ 755-57, 16028-29 ¶ 1064; *LEC-CMRS Interconnection NPRM*, 11 FCC Rcd. at 5051 ¶ 67.

of various implementation problems,¹⁷⁵ however, the Commission has never ordered a peak-load pricing rate structure, though it has permitted such rate structures. In implementing the reciprocal compensation provisions of the 1996 Act, for example, the Commission permitted states to adopt alternative rate structures, including: (1) a higher rate for peak periods; (2) a uniform per-minute rate; (3) a capacity-based rate; or (4) a bill-and-keep arrangement, provided that traffic is relatively balanced.¹⁷⁶ States, however, in applying the Commission's rules governing reciprocal compensation, have generally adopted average per-minute rates. Similarly, with respect to interstate access charges, the Commission has permitted ILECs to charge either a uniform per-minute rate to recover the costs of switching, or a two-part tariff consisting of a call setup charge and a per-minute charge.¹⁷⁷ The Commission has also sought comment on whether it should adopt capacity-based charges to recover switching costs.¹⁷⁸

110. Our recent experience with ISP reciprocal compensation issues suggests certain questions about the use of uniform per-minute charges to recover the traffic-sensitive costs of termination. In particular, it appears that the Commission may have underestimated the inefficiencies associated with the use of uniform per-minute prices. Accordingly, we seek comment first on whether an average per-minute rate structure can efficiently recover the traffic sensitive costs of interconnection, whether for reciprocal compensation or for access charges. If parties believe that such a rate structure is inherently inefficient, then we ask them to propose alternative, more efficient rate structures. We also seek comment on whether the Commission overestimated the practical difficulties associated with peak-load pricing arrangements. In particular, we seek comment on: (1) how to deal with the practical, implementation problems associated with peak-load pricing; and (2) whether a peak-load pricing structure can eliminate the regulatory arbitrage opportunities of the existing interconnection pricing regimes.

111. We also invite comment on whether alternative rate structures would be more efficient, and whether they would eliminate some of the problems we are currently experiencing. For example, we ask parties to comment on the advantages and disadvantages of using a capacity-based rate structure, and a multi-part rate structure that includes both a call set-up charge and a per-minute charge. Finally, we invite parties to propose alternative rate structures that they believe would be more efficient, and to explain the basis for their belief.

c. Single Point of Interconnection Issues

112. As previously mentioned, an ILEC must allow a requesting telecommunications carrier to interconnect at any technically feasible point, including the option to interconnect at a

¹⁷⁵ The practical difficulties associated with peak-load pricing schemes include: (1) that peak traffic volumes may occur at different times in different areas (*e.g.*, between a downtown business area and a residential suburb); (2) that peak periods may change over time (*e.g.*, in response to increasing Internet use); and (3) that implementing a peak-load pricing scheme may cause a shift in the peak.

¹⁷⁶ See 47 C.F.R. §§ 51.507(c), 51.713; *Local Competition Order*, 11 FCC Rcd. at 15878-79 ¶¶ 755-757, 16028-29 ¶¶ 1063-64.

¹⁷⁷ See 47 C.F.R. § 69.106

¹⁷⁸ *Pricing Flexibility Order and NPRM*, 14 FCC Rcd. at 14328-30 ¶¶ 211-16.

single POI per LATA.¹⁷⁹ Our current reciprocal compensation rules preclude an ILEC from charging carriers for local traffic that originates on the ILEC's network.¹⁸⁰ These rules also require that an ILEC compensate the other carrier for transport¹⁸¹ and termination¹⁸² for local traffic that originates on the network facilities of such other carrier.¹⁸³ Application of these rules has led to questions concerning which carrier should bear the cost of transport to the POI, and under what circumstances an interconnecting carrier should be able to recover from the other carrier the costs of transport from the POI to the switch serving its end user. In particular, carriers have raised the question whether a CLEC, establishing a single POI within a LATA, should pay the ILEC transport costs to compensate the ILEC for the greater transport burden it bears in carrying the traffic outside a particular local calling area to the distant single POI.¹⁸⁴ Some ILECs will interconnect at any POI within a local calling area; however, if a CLEC wishes to interconnect outside the local calling area, some LECs take the position that the CLEC must bear all costs for transport outside the local calling area.¹⁸⁵ CLECs hold the contrary view, that our rules simply require LECs to interconnect at any technically feasible point within a LATA, and that each carrier must bear its own transport costs on its side of the POI.¹⁸⁶

113. If a carrier establishes a single POI in a LATA, should the ILEC be obligated to interconnect there and thus bear its own transport costs up to the single POI when the single POI is located outside the local calling area? Alternatively, should a carrier be required either to interconnect in every local calling area, or to pay the ILEC transport and/or access charges if the location of the single POI requires the ILEC to transport a call outside the local calling area? Further, if we should determine that a carrier establishing a single POI outside a local calling area must bear some portion of the ILEC's transport costs, do our regulations permit the imposition of access charges for calls that originate and terminate within one local calling area but cross local calling area boundaries due to the placement of the POI?¹⁸⁷

¹⁷⁹ See *supra* note 91 and accompanying text.

¹⁸⁰ See In the Matter of Joint Application by SBC Communications, Inc. *et al.* for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, CC Docket No. 00-217, *Memorandum Opinion and Order*, FCC 01-29 at ¶ 235 (rel. Jan. 22, 2001) ("*Kansas/Oklahoma 271 Order*") (citing 47 C.F.R. § 51.703(b); In the Matters of TSR Wireless, LLC *et al.* v. U.S. West, 15 FCC Rcd. 11166 (2000), *pet. for review docketed sub nom.*, *Qwest v. FCC*, No. 00-1376 (D.C. Cir. Aug. 17, 2000)).

¹⁸¹ 47 C.F.R. § 51.701(c).

¹⁸² 47 C.F.R. § 51.701(d).

¹⁸³ 47 C.F.R. § 51.701(e).

¹⁸⁴ See *Kansas/Oklahoma 271 Order*, *supra* note 180, at ¶¶ 232-34.

¹⁸⁵ SBC Reply in CC Docket No. 00-217, at 83-84.

¹⁸⁶ AT&T Comments in CC Docket No. 00-217, Attachment 2, Fettig Declaration, at 26-27.

¹⁸⁷ See *ISP Inter-carrier Compensation Order* at ¶¶ 24-30 (discussing relationship between reciprocal compensation and access charges).

114. Finally, we are concerned that the interplay of our single POI rules and reciprocal Compensation rules may lead to the deployment of inefficient or duplicative networks. By requiring an ILEC to interconnect with a requesting carrier at any technical feasible point in a LATA of that carrier's choosing, are we compelling inefficient network design by forcing the LEC to provision extra transport? Or, by requiring carriers to pay ILECs for transport outside a local calling area, are we forcing the competitive carrier into an inefficient replication of the ILEC network? Assuming that the ILEC receives reciprocal compensation for transporting terminating traffic, how precisely does a distant POI unfairly burden the LEC? Is the efficiency concern limited to those instances in which traffic between two networks is unbalanced and/or where transport is required beyond a certain distance? We seek comment on these questions, and any other issues related to the interplay between our single POI rules and our reciprocal compensation rules.

d. Virtual Central Office Codes

115. We seek comment on the use of virtual central office codes (NXXs),¹⁸⁸ and their effect on the reciprocal compensation and transport obligations of interconnected LECs. Commenters in this proceeding have indicated that some LECs are inappropriately using virtual NXXs to collect reciprocal compensation for traffic that the ILEC is then forced to transport outside of the local calling area.¹⁸⁹ We note that the Commission has delegated some of its authority to state public utility commissions in order that they may order the North American Numbering Plan Administrator (NANPA) to reclaim NXX codes that are not used in accordance with the Central Office Code Assignment Guidelines.¹⁹⁰ The Maine Public Utility Commission recently addressed the issue of virtual NXXs when it directed the NANPA to reclaim the NXX codes that Brooks Fiber used to provide "unauthorized interexchange service" as opposed to "facilities-based local exchange service."¹⁹¹ In light of these developments, we seek comment on the following issues: (1) Under what circumstances should a LEC be entitled to use virtual NXX codes? (2) If LECs are permitted to use virtual NXX codes, what is the transport obligation of the originating LEC? (3) Should the LEC employing the virtual NXX code be required to provide transport from the central offices associated with those NXX codes?

2. Can CPNP Regimes Resolve the Existing Interconnection Issues and Will They Be Administratively Feasible?

116. We seek comment on how, if the Commission declines to adopt bill and keep, the existing CPNP regimes could be modified to deal with the issues presented by existing

¹⁸⁸ Virtual NXX codes are central office codes that correspond with a particular geographic area that are assigned to a customer located in a different geographic area.

¹⁸⁹ See, e.g., BellSouth *ex parte* in CC Docket No. 99-68 at 2 (Nov. 7, 2000).

¹⁹⁰ See In the Matter of Numbering Resource Optimization, CC Docket No. 99-200, *Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd. 7574, 7678-7682 (2000).

¹⁹¹ Investigation into the Use of Central Office Codes (NXXs) by New England Fiber Communications, LLC d/b/a Brooks Fiber Docket No. 98-758, Order Requiring Reclamation of NXX Codes and Special ISP Rates by ILECs, Order No. 4, at 4 (Maine PUC June 30, 2000).

interconnection regimes, and whether CPNP regimes can be modified so that regulators can administer them easily. We also seek comment on how existing CPNP rules could be modified to address situations of regulatory arbitrage. To the extent that certain regulatory arbitrage opportunities arise from the disparities between existing interconnection regimes, we seek comment on the costs and benefits of moving to a uniform CPNP regime.

117. We also seek comment on how, under a unified CPNP regime, regulators should deal with the terminating access monopoly problem. In this regard, we ask parties to discuss the administrative feasibility of any proposed solution to this problem. For example, is there any way that regulators can avoid having to regulate the access rates of all local carriers? If the rates of all local carriers must be regulated, is there any way to simplify the form of regulation? For example, should we simply prohibit CLECs from charging terminating access charges that exceed those of the ILEC?

118. Parties should also address whether a CPNP regime increases the possibility of predatory price squeezes, particularly against long-distance carriers, and how this problem could be addressed. In this context, and to the extent that parties contend we should drop the presumption of symmetrical reciprocal compensation rates, we seek comment on how we can minimize the administrative burdens of setting multiple interconnection rates.

119. With respect to the problem of inefficient end-user charges, we seek comment on how existing CPNP rules can be modified to reduce this problem. For example, would this problem disappear if we moved to a capacity-based intercarrier compensation scheme? We also invite comment on how we can modify the existing intercarrier compensation scheme to eliminate any regulatory inefficiencies that might cause an entity to claim to be a network rather than a subscriber. Similarly, we seek comment on whether CPNP regimes create an incentive for carriers to discriminate between on-net and off-net calls, and whether this could increase any tendency toward tipping into monopoly.

120. Finally, we ask parties to comment on the administrative costs or regulatory burdens associated with reforming the existing CPNP regimes and making them more uniform. We also ask parties to discuss whether, under a CPNP regime, regulatory intervention can be reduced. For example, can rules be adopted that provide incentives for carriers to reveal their true costs of termination in a regulatory or arbitration process? Alternatively, if we will be unable to eliminate regulatory intervention, can we simplify the regulations?

D. Other Issues

1. Legal Authority

121. In Section II.B.6 above, we seek comment on whether the Commission has legal authority to establish bill-and-keep arrangements for reciprocal compensation between telecommunications carriers. With respect to any modification to the existing intercarrier compensation rules discussed herein or proposed by any party, we seek comment on whether the Commission has legal authority to adopt such a modification. In particular, with respect to bill-and-keep arrangements, we seek comment on whether the Commission has legal authority to modify our existing interstate access rules to move them into a bill-and-keep regime. Additionally, we seek comment (particularly from state public utility commissions) on whether

the state commissions have authority to mandate bill-and-keep arrangements for intrastate access charges. Finally, to the extent that parties believe it is important for bill-and-keep arrangements to be administered uniformly, we seek comment on how the Commission could ensure that all states adopt a bill-and-keep approach to intrastate access charges.

2. Jurisdictional Responsibility

122. As previously indicated, this Commission and the state public utility commissions have long shared the responsibility for regulating intercarrier compensation. Furthermore, this Commission has always strived to cooperate with the states to carry out this dual responsibility. In considering ways to reform intercarrier compensation, we are cognizant of the need to cooperate with the states, and the importance of not interfering unnecessarily with legitimate state policies. Thus, with respect to any proposed intercarrier compensation reform, we seek comment on how such a reform might affect this balance of responsibilities between the Commission and the states. We also seek comment on how each proposed reform might affect existing state policies. Finally, we seek comment on how each proposed reform might affect other existing Commission and state regulations. For example, how would a bill-and-keep regime for carrier access charges affect existing separations rules?

3. Impact on End-User Prices and Universal Service

123. We recognize that modifying our existing intercarrier compensation rules may affect end-user prices. For example, reforming the existing CPNP regimes might require a reduction in per-minute charges and an increase in flat charges. Similarly, DeGraba argues that instituting a bill-and-keep arrangement should result in a reduction in traffic-sensitive end-user rates, and a concomitant increase in network usage. Such a shift would also likely result in some increase in the flat-rated charges assessed against end users. In addition, while it is possible that, in moving to a bill-and-keep regime, carriers would simply charge existing traffic-sensitive termination charges to their end-user customers, it appears equally likely, or more likely, that carriers might modify the rate structure by moving to flat-rated charges. This likewise would result in an increase in flat-rated end-user charges. Finally, if we were to move to a bill-and-keep regime for access charges, this would reduce the portion of a consumer's total telecommunications bill that is subject to the geographic rate averaging required by section 254(g), which could further increase the rates of customers in high-cost areas. We seek comment on how significant any increase in flat-rated charges may be, and also the extent to which increases in flat-rated charges may affect telephone penetration levels. In particular, we invite parties to comment on the elasticities of demand with respect to usage and subscription. We also seek comment on the aggregate costs and benefits of a bill-and-keep approach, including any distributional consequences to any particular subscriber group.

124. We also seek comment on how a bill-and-keep regime would impact universal service. Specifically, we seek comment on whether a bill-and-keep approach would affect the Commission's ability to preserve and advance universal service through specific and predictable support mechanisms as required by the Communications Act.¹⁹² For example, to the extent that higher fixed rates may cause certain subscribers to drop off the network, we seek comment on

¹⁹² See 37 U.S.C. § 254.

how we can continue to achieve universal service throughout the U.S. In addition, we seek comment on how any new intercarrier compensation regime, including bill and keep, will impact the collection of universal service contributions under the existing contribution methodology. Since our contribution methodology continues to evolve in response to changing market conditions, we seek comment on how that methodology should account for any new intercarrier compensation regime that we establish.¹⁹³

4. Impact on Interconnection Agreements Between International Carriers

125. As previously indicated, this *NPRM* focuses on efficient intercarrier compensation mechanisms for all types of carriers interconnecting with a local telephone network, and for all types of traffic passing over that network. We invite parties to comment on whether any reforms we adopt as part of this proceeding should be extended to other interconnection arrangements; and if not, how such reforms might affect other types of interconnection arrangements. In particular, we seek comment on whether the reforms proposed for domestic intercarrier compensation could be a useful substitute for the traditional international settlements system¹⁹⁴ for the exchange of international traffic between U.S. international carriers and foreign carriers, were they adopted by other countries. The current international accounting rate system was developed as part of a regulatory tradition in which international telecommunications services were supplied through a bilateral correspondent relationship between national monopoly carriers. An accounting rate is the price that a U.S. facilities-based carrier negotiates with a foreign carrier for handling one minute of international telephone service. Each carrier's portion of the accounting rate is referred to as the settlement rate. In almost all cases, the settlement rate is equal to one-half the negotiated accounting rate. In a series of decisions since 1996, the Commission has adopted policies to encourage U.S. carriers to negotiate settlement arrangements outside the traditional accounting rate system with foreign carriers that lack market power and on routes where there is competition within the foreign market.

126. We also seek comment on what impact the proposed reforms, if adopted solely for domestic intercarrier compensation, would have on international settlement arrangements and on the prices that consumers pay for international services. We further seek comment on whether the reforms would require revision of the Commission's international settlement rate benchmarks policy and/or the International Settlements Policy.¹⁹⁵ The International Settlements Policy requires: (1) the equal division of the accounting rate between the U.S. and foreign carrier; (2) nondiscriminatory treatment of U.S. carriers (all U.S. carriers must receive the same

¹⁹³ See In the Matter of Federal-State Joint Board on Universal Service, *Report and Order and Order on Reconsideration*, CC Docket No. 96-45, FCC 01-85 (rel. Mar. 14, 2001) (modifying universal service collection mechanism by shortening revenue assessment from one year to six months).

¹⁹⁴ See Policy Statement on International Accounting Rate Reform, 11 FCC Rcd. 3146 (1996); *In the Matter of Regulation of International Accounting Rates, Phase II, Fourth Report and Order*, 11 FCC Rcd. 20063 (1996); In the Matter of 1998 Biennial Regulatory Review, Reform of the International Settlements Policy and Associated Filing Requirements, *Report and Order on Reconsideration*, 14 FCC Rcd. 7963 (1999).

¹⁹⁵ See In the Matter of Implementation and Scope of the Uniform Settlements Policy for Parallel Routes, *Report and Order*, 51 Fed. Reg. 4736 (1986).

accounting rate, with the same effective date); and (3) proportionate return of inbound traffic. The International Settlements Policy was developed to prevent foreign monopoly carriers from discriminating against U.S. international carriers in their settlement negotiations. The international settlement rate benchmarks policy requires U.S. carriers to negotiate settlement rates that comply with “benchmark rates” established by the Commission. In the Benchmarks Order, the Commission categorized countries by economic development level and established three benchmark rates for the different categories and a transition timetable from January 1, 1999 to January 1, 2003 for achieving those rates.¹⁹⁶

5. Impact on Interconnection Agreements Between Internet Backbones

127. As previously indicated, we do not intend to address directly the issue of interconnection agreements among Internet backbones. The backbones appear to be successfully negotiating interconnection agreements among themselves without any regulatory intervention, and we see no reason to intervene in this efficiently functioning market. Nevertheless, we are concerned that any of the actions we might take in this proceeding could have unintended consequences for interconnection agreements among Internet backbones. Thus, with respect to the various proposals for reforming intercarrier compensation, we seek comment on whether such proposals are consistent with existing interconnection arrangements among Internet backbones, and how, if at all, they might affect these privately negotiated arrangements.

6. Impact on Small Entities

128. For each proposed approach to intercarrier compensation, we seek further comment on the potential impact on small entities. We seek comment on the relative importance of developing a unified regime, and the pro-competitive vision of the 1996 Act, weighed against the specific needs of small entities in (and new entrants into) the telecommunications market. For example, would a different compliance timetable for small entities be appropriate in any of these contexts?

7. Further Possible Approaches to Intercarrier Compensation

129. Finally, we ask parties to comment on whether there are other types of intercarrier compensation not yet addressed (*i.e.*, unified CPNP approaches, or approaches other than CPNP and bill and keep) that can ameliorate the problems facing existing intercarrier compensation arrangements. In particular, we invite parties to propose alternative unified approaches to reforming intercarrier compensation. With respect to each proposal, we ask that the parties explain how their proposal encourages efficient usage of the network and deployment of network infrastructure, the likely transaction costs, whether their proposal solves existing interconnection problems, and whether it creates new ones.

130. Additionally, we ask parties to comment on the use of a market-based approach to intercarrier compensation. Specifically, we seek comment on whether allowing carriers freely to

¹⁹⁶ See International Settlement Rates, IB Docket No. 96-261. *Report and Order on Reconsideration and Order Lifting Stay*, 14 FCC Rcd. 9256 (1996); *affd sub nom. Cable & Wireless P.L.C. v. FCC*, 166 F.3d 1224 (D.C. Cir. 1999).

contract arrangements for intercamer compensation could serve as a unified or partial approach to reforming intercarrier compensation. In what circumstances would such an approach lead to more efficient results, or better resolve the current problems, than a regulatory approach?

We also ask parties to address whether, under a contract-based approach, carriers should be allowed to refuse to carry traffic for each other. What are the legal and practical implications of allowing parties to refuse to carry traffic for each other? What are the potential impacts of this behavior on small entities? Parties should also address the circumstances under which the use of tariffs rather than contracts would be more efficient or would better resolve the problems facing existing intercarrier compensation arrangements.

IV. PROCEDURAL MATTERS

A. Initial Regulatory Flexibility Analysis

131. As required by the Regulatory Flexibility Act (RFA),¹⁹⁷ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in this *NPRM*. Written public comments are requested on this IRFA. Comments must be identified as responses to the **IRFA** and must be filed by the deadlines for comments on the *NPRM* provided below in paragraph 182. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). *See* 5 U.S.C. § 603(a). In addition, the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register. *See id.*

1. Need for, and Objectives of, the Proposed Rules

132. The existing intercarrier compensation regime applies different sets of rules to different types of carriers and to different types of traffic. Basically, this patchwork of rules can be broken down into: (1) reciprocal compensation rules, which apply to the exchange of local traffic; and (2) access rules that apply to traffic exchanged between local carriers and long-distance carriers. Both sets of rules are “calling-party’s-network-pays” (CPNP) arrangements (i.e., they require the calling party’s network to pay the called party’s network to terminate a call). Both sets of rules are also subject to numerous exceptions, such as the enhanced service provider (ESP) exemption from access charges.

133. This *NPRM* is motivated by numerous problems that have appeared recently concerning the existing rules governing intercarrier compensation. A primary concern is the opportunity, under the current regime, for profit-seeking behavior to take advantage of cost or revenue disparities that are due solely to regulation. For example, competitive local exchange carriers (CLECs) often target Internet service providers (ISPs) as customers in order to become net-recipients of traffic, and thus profit from reciprocal compensation revenues. Similarly, Internet Protocol (IP) telephony threatens to erode access revenues for LECs because it is exempt from the access charges that traditional long-distance carriers must pay. Another major concern

¹⁹⁷ *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

is that local carriers possess monopoly power over terminating access. As a result, CLECs often impose access charges that far exceed the regulated access charges of incumbent LECs. Finally, the current regime can generate inefficient traffic-sensitive end-user rates, and can also create incentives for entities to claim to be networks in order to qualify for interconnection, rather than to simply subscribe as a customer.

134. This *NPRM* seeks comment on the existing CPNP regime, and asks whether it can be effectively reformed to address these problems. This *NPRM* also seeks comment on alternative approaches to intercarrier compensation, including the possibility of adopting some form of “bill and keep.” In particular, this *NPRM* seeks comment on the proposals contained in two working papers written by Commission staff members. In the first paper, Patrick DeGraba proposes the following two rules (called Central Office Bill and Keep, or “COBAK”): (1) that no carrier may recover any costs of its customers’ local access facilities from an interconnecting carrier; and (2) that the calling party’s network is responsible for the cost of transporting the call to the called party’s central office. In the second paper, Jay M. Atkinson and Christopher C. Barnekov propose another set of rules (called Bill Access to Subscribers–Interconnection Cost Split, or “BASICS”): (1) networks should recover all intra-network costs from their end-user customers; and (2) networks should divide equally the costs that result purely from interconnection. This *NPRM* seeks comment on COBAK and BASICS, together with any alternative bill-and-keep approaches.

135. With respect to each approach to intercarrier compensation, this *NPRM* seeks comment on whether it will encourage an efficient use of, and investment in, the network, and whether it will be administratively feasible. This *NPRM* also seeks comment on whether each of the alternative proposals will solve existing interconnection problems, and the extent to which the proposals will create new problems.

2. Legal Basis

136. The legal basis for any action that may be taken pursuant to the *NPRM* is contained in sections 4, 201-202, 303 and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 201-202, 303 and 403, and sections 1.1, 1.411 and 1.412 of the Commission’s rules, 47 C.F.R. §§ 1.1, 1.411 and 1.412.

3. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

137. The RFA directs agencies to provide a description of, and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.¹⁹⁸ The RFA defines the term “small entity” as having the same meaning as the terms “small business,” “small organization” and “small business concern” under section 3 of the Small Business Act.¹⁹⁹ A small business concern is one which: (1) is **independently owned and**

¹⁹⁸ 5 U.S.C. § 603(b)(3).

¹⁹⁹ *Id.* at § 601(3).

operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.²⁰⁰

138. A small organization is generally “any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.”²⁰¹ Nationwide, as of 1992, there were approximately 275,801 small organizations.²⁰² “Small governmental jurisdiction”²⁰³ generally means “governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000.”²⁰⁴ As of 1992, there were approximately 85,006 such jurisdictions in the United States.²⁰⁵ This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.²⁰⁶ The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (96 percent) are small entities. According to SBA reporting data, there were 4.44 million small business firms nationwide in 1992.²⁰⁷ Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by rules adopted pursuant to this *NPRM*.

139. The most reliable source of information regarding the total numbers of certain common carrier and related providers nationwide, as well as the number of commercial wireless entities, appears to be the data that the Commission publishes in its *Trends in Telephone Service* report.²⁰⁸ In a recent news release, the Commission indicated that there are 4,822 interstate carriers.²⁰⁹ These carriers include, *inter alia*, local exchange carriers, wireline carriers and service providers, interexchange carriers, competitive access providers, operator service providers, pay telephone operators, providers of telephone service, providers of telephone exchange service, and resellers.

140. The SBA has defined establishments engaged in providing “Radiotelephone Communications” and “Telephone Communications, Except Radiotelephone” to be small

²⁰⁰ *Id.* at § 632.

²⁰¹ *Id.* at § 601(4).

²⁰² 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

²⁰³ 47 C.F.R. § 1.1162

²⁰⁴ 5 U.S.C. § 601(5).

²⁰⁵ U.S. Dept. of Commerce, Bureau of the Census, “1992 Census of Governments.”

²⁰⁶ *Id.*

²⁰⁷ 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

²⁰⁸ Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 16.3(Dec. 2000).

²⁰⁹ *Id.*

businesses when they have no more than 1,500 employees.²¹⁰ Below, we discuss the total estimated number of telephone companies falling within the two categories, and the number of small businesses in each. We then attempt to further refine those estimates to correspond with the categories of telephone companies that are commonly used under our rules.

141. We have included small incumbent LECs (small ILECs) in this present RFA analysis. As noted above, a “small business” under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and “is not dominant in its field of operation.”²¹¹ The SBA’s Office of Advocacy contends that, for RFA purposes, small ILECs are not dominant in their field of operation because any such dominance is not “national” in scope.²¹² We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts.

142. ***Total Number of Telephone Companies Affected.*** The U.S. Bureau of the Census (“Census Bureau”) reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.²¹³ This number contains a variety of different categories of carriers, including local exchange carriers, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, covered specialized mobile radio providers, and resellers. It seems certain that some of these 3,497 telephone service firms may not qualify as small entities or small ILECs because they are not “independently owned and operated.”²¹⁴ For example, a PCS provider that is affiliated with an interexchange carrier having more than 1,500 employees would not meet the definition of a small business. It is reasonable to conclude that fewer than 3,497 telephone service firms are small entity telephone service firms or small ILECs that may be affected by the new rules.

143. ***Wireline Carriers and Service Providers.*** The SBA has developed a definition of small entities for telephone communications companies except radiotelephone (i.e., wireless) companies. The Census Bureau reports that there were 2,321 such telephone companies in operation for at least one year at the end of 1992.²¹⁵ According to the SBA’s definition, a small

²¹⁰ See 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) codes 4812 and 4813; see also Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual* (1987).

²¹¹ 5 U.S.C. § 601(3).

²¹² Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of “small business concern,” which the RFA incorporates into its own definition of “small business.” See 15 U.S.C. § 632(a); 5 U.S.C. § 601(3). SBA regulations interpret “small business concern” to include the concept of dominance on a national basis. 13 C.F.R. § 121.102(b). Since 1996, out of an abundance of caution, the Commission has included small incumbent LECs in its regulatory flexibility analyses. See, e.g., *Local Competition Order*, 11 FCC Rcd. at 16144-45 (1996).

²¹³ U.S. Department of Commerce, Bureau of the Census, 1992 *Census of Transportation, Communications, and Utilities: Establishment and Firm Size*, at *Firm Size* 1-123 (1995) (“1992 Census”).

²¹⁴ See generally 15 U.S.C. § 632(a)(1).

²¹⁵ 1992 *Census* at *Firm Size* 1-123.

business telephone company other than a radiotelephone company is one employing no more than 1,500 persons.²¹⁶ All but 26 of the 2,321 non-radiotelephone companies listed by the Census Bureau were reported to have fewer than 1,000 employees. Thus, even if all 26 of those companies had more than 1,500 employees, there would still be 2,295 non-radiotelephone companies that might qualify as small entities or small ILECs. We do not have data specifying the number of these carriers that are not independently owned and operated, and thus are unable at this time to estimate with greater precision the number of wireline carriers and service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate 2,295 or fewer small telephone communications companies other than radiotelephone companies are small entities or small ILECs that may be affected by rules adopted pursuant to this *NPRM*.

144. *Local Exchange Carriers*. Neither the Commission nor the SBA has developed a definition for small providers of local exchange services (**LECs**). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (*i.e.*, wireless) companies.²¹⁷ According to the most recent *Telecommunications Industry Revenue* data, 1,335 incumbent carriers reported that they were engaged in the provision of local exchange services.²¹⁸ We do not have data specifying the number of these carriers that are either dominant in their field of operations, are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of LECs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that 1,335 or fewer providers of local exchange service are small entities or small ILECs that may be affected by the new rules.

145. *Interexchange Carriers*. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of interexchange services (IXCs). The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (*i.e.*, wireless) companies.²¹⁹ According to the most recent *Trends in Telephone Service* data, 204 carriers reported that they were engaged in the provision of interexchange services.²²⁰ We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of IXCs that would qualify as small business concerns under the **SBA's** definition. Consequently, we estimate that there are 204 or fewer small-entity **IXCs** that may be affected by rules adopted pursuant to this *NPRM*.

146. *Competitive Access Providers*. Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to competitive access services providers (**CAPs**). The closest applicable definition under the SBA rules is for telephone

²¹⁶ 13 C.F.R. § 121.201, SIC code **4813**.

²¹⁷ *Id.*

²¹⁸ *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

²¹⁹ 13 C.F.R. § 121.201, SIC code 4813

²²⁰ *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

communications companies other than radiotelephone (*i.e.*, wireless) companies.²²¹ According to the most recent *Trends in Telephone Service* data, 349 CAP/CLEC carriers and 60 other LECs reported that they were engaged in the provision of competitive local exchange services.²²² We do not have data specifying the number of these carriers that are not independently owned and operated, or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of CAPs that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are **349** or fewer small-entity CAPs and 60 or fewer other LECs that may be affected by rules adopted pursuant to this *NPRM*.

147. *Operator Service Providers.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to providers of operator services. The closest applicable definition under the SBA rules is for telephone communications companies other than radiotelephone (*i.e.*, wireless) companies.²²³ According to the most recent *Trends in Telephone Service* data, 21 carriers reported that they were engaged in the provision of operator services.²²⁴ We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of operator service providers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are 21 or fewer small-entity operator service providers that may be affected by rules adopted pursuant to this *NPRM*.

148. *Pay Telephone Operators.* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to pay telephone operators. The closest applicable definition under SBA rules is for telephone communications companies other than radiotelephone (*i.e.*, wireless) companies.²²⁵ According to the most recent *Trends in Telephone Service* data, 758 carriers reported that they were engaged in the provision of pay telephone services.²²⁶ We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of pay telephone operators that would qualify as small business concerns under the **SBA's** definition. Consequently, we estimate that there are 758 or fewer small-entity pay telephone operators that may be affected by rules adopted pursuant to this *NPRM*.

149. *Resellers (including debit card providers).* Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to resellers. The closest applicable **SBA** definition for a reseller is a telephone communications company other than

²²¹ 13 C.F.R. § 121.201, SIC code 4813.

²²² *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

²²³ 13 C.F.R. § 121.201, SIC code 4813.

²²⁴ *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

²²⁵ 13 C.F.R. § 121.201, SIC code 4813.

²²⁶ *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

radiotelephone (*i.e.*, wireless) companies.²²⁷ According to the most recent *Trends in Telephone Service* data, 454 toll and 87 local entities reported that they were engaged in the resale of telephone service.²²⁸ We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of resellers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are 454 or fewer small-toll-entity resellers and 87 or fewer small-local-entity resellers that may be affected by rules adopted pursuant to this *NPRM*.

150. ***Toll-Free 800 and 800-Like Service Subscribers.***²²⁹ Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to 800 and 800-like service ("toll free") subscribers. The most reliable source of information regarding the number of these service subscribers appears to be data the Commission collects on the 800, 888, and 877 numbers in use.²³⁰ According to our most recent data, at the end of January 1999, the number of 800 numbers assigned was 7,692,955; the number of 888 numbers that had been assigned was 7,706,393; and the number of 877 numbers assigned was 1,946,538. We do not have data specifying the number of these subscribers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of toll free subscribers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are 7,692,955 or fewer small-entity 800 subscribers, 7,706,393 or fewer small-entity 888 subscribers, and 1,946,538 or fewer small-entity 877 subscribers that may be affected by rules adopted pursuant to this *NPRM*.

151. ***Cellular Licensees.*** Neither the Commission nor the SBA has developed a definition of small entities applicable to cellular licensees. Therefore, the applicable definition of small entity is the definition under the SBA rules applicable to radiotelephone (*i.e.*, wireless) companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons.²³¹ According to the Bureau of the Census, only 12 radiotelephone firms out of a total of 1,178 such firms that operated during 1992 had 1,000 or more employees.²³² Therefore, even if all 12 of these firms were cellular telephone companies, nearly all cellular carriers were small businesses under the SBA's definition. In addition, we note that there are 1,758 cellular licenses; however, we do not know the number of cellular licensees, since a cellular licensee may own several licenses. The most reliable source of information regarding the number of cellular service providers nationwide appears to be data the Commission publishes annually in its *Telecommunications Industry Revenue* report, regarding the Telecommunications Relay Service (TRS). The report places cellular licensees and Personal

²²⁷ 13 C.F.R. § 121.201, SIC code 4813.

²²⁸ *Trends in Telephone Service*, *supra* note 208, at Table 16.3.

²²⁹ We include all toll-free number subscribers in this category, including 888 number subscribers.

²³⁰ *Trends in Telephone Service*, *supra* note 208, at Table 19.2.

²³¹ 13 C.F.R. § 121.201, SIC code 4812.

²³² 1992 Census at Firm Six 1-123.

Communications Service (PCS) licensees in one group. According to recent data, 808 carriers reported that they were engaged in the provision of either cellular or PCS services.²³³ We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of cellular service carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are no more than 808 small cellular service carriers.

152. **220 MHz Radio Service—Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and 4 nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the definition under the SBA rules applicable to radiotelephone communications companies. This definition provides that a small entity is a radiotelephone company employing no more than 1,500 persons.²³⁴ According to a 1995 estimate by the Bureau of the Census, only 12 radiotelephone firms out of a total of 1,178 such firms that operated during 1992 had 1,000 or more employees.²³⁵ Therefore, assuming that this general ratio has not changed significantly in recent years in the context of Phase I 220 MHz licensees, we estimate that nearly all such licensees are small businesses under the SBA's definition.

153. **220 MHz Radio Service—Phase II Licensees.** The Phase II 220 MHz service is a new service, and is subject to spectrum auctions. In the 220 MHz *Third Report and Order*, we adopted criteria for defining small businesses and very small businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.²³⁶ We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years. Additionally, a very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.²³⁷ The SBA has approved these definitions.²³⁸ An auction of

²³³ Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (Mar. 2000).

²³⁴ 13 C.F.R. § 121.201, SIC code 4812.

²³⁵ 1992 *Census* at *Firm Size* 1-123.

²³⁶ In the Matter of Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, *Third Report and Order*, 12 FCC Rcd. 10913, 11068-70 ¶¶ 291-95 (1997).

²³⁷ *Id.* at 11068-69 ¶ 291.

²³⁸ See Letter from A. Alvarez, Administrator, SBA, to D. Phythyon, Chief, Wireless Telecommunications Bureau, FCC (filed Jan. 6, 1998).

Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.²³⁹ Nine hundred and eight (908) licenses were auctioned in three different-sized geographic areas: 3 nationwide licenses, 30 Regional Economic Area Group (REAG) licenses, and 875 Economic Area (EA) licenses. Of the 908 licenses auctioned, 693 were sold. Companies claiming small business status won: 1 of the Nationwide licenses, 67% of the Regional licenses, 47% of the REAG licenses and 54% of the EA licenses. As of January 22, 1999, the Commission announced that it was prepared to grant 654 of the Phase II licenses won at auction.²⁴⁰ A second 220 MHz Radio Service auction began on June 8, 1999 and closed on June 30, 1999. This auction offered 225 licenses in 87 EAs and 4 REAGs. (A total of 9 REAG licenses and 216 EA licenses. No nationwide licenses were available in this auction.) Of the 215 EA licenses won, 153 EA licenses (71%) were won by bidders claiming small business status. Of the 7 REAG licenses won, 5 REAG licenses (71%) were won by bidders claiming small business status.

154. ***Private and Common Carrier Paging.*** The Commission has adopted a two-tier definition of small businesses in the context of auctioning licenses in the Common Carrier Paging and exclusive Private Carrier Paging services. A small business will be defined as either: (1) an entity that, together with its affiliates and controlling principals, has average gross revenues for the three preceding years of not more than \$3 million; or (2) an entity that, together with affiliates and controlling principals, has average gross revenues for the three preceding calendar years of not more than \$15 million. Because the SBA has not yet approved this definition for paging services, we will utilize the SBA's definition applicable to radiotelephone companies, *i.e.*, an entity employing no more than 1,500 persons.²⁴¹ At present, there are approximately 24,000 Private Paging licenses and 74,000 Common Carrier Paging licenses. According to recent data, 172 carriers reported that they were engaged in the provision of either paging or "other mobile" services, which are placed together in the data.²⁴² We do not have data specifying the number of these carriers that are not independently owned and operated or have more than 1,500 employees, and thus are unable at this time to estimate with greater precision the number of paging carriers that would qualify as small business concerns under the SBA's definition. Consequently, we estimate that there are no more than 172 small paging carriers. We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

155. ***Mobile Service Carriers.*** Neither the Commission nor the SBA has developed a definition of small entities specifically applicable to mobile service carriers, such as paging companies. As noted above in the section concerning paging service carriers, the closest applicable definition under the SBA rules is that for radiotelephone (*i.e.*, wireless) companies,²⁴³

²³⁹ See generally Phase II 220 MHz Service Auction Closes, Auction No. 18, *Public Notice*, 14 FCC Rcd. 605 (1998).

²⁴⁰ FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made, Auction No. 18, *Public Notice*, 14 FCC Rcd. 1085 (1999).

²⁴¹ 13 C.F.R. § 171.201, SIC code 4812.

²⁴² Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service*, Table 19.3 (Feb. 19, 1999).

²⁴³ 13 C.F.R. § 121.201, SIC code 4812.

and recent data show that 172 carriers reported that they were engaged in the provision of either paging or "other mobile" services.'" Consequently, we estimate that there are no more than 172 small mobile service carriers.

156. **Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission defined "small entity" for blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.²⁴⁵ For block F, an additional classification for "very small business" was added and is defined as an entity that, together with affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.²⁴⁶ These regulations defining "small entity" in the context of broadband PCS auctions have been approved by the SBA.²⁴⁷ No small businesses within the SBA-approved definition bid successfully for licenses in blocks A and B. There were 90 winning bidders that qualified as small entities in the C block auctions. A total of 93 small and very small business bidders won approximately 40% of the 1,479 licenses for blocks D, E and F.²⁴⁸ On March 23, 1999, the Commission held another auction (Auction No. 22) of C, D, E and F block licenses for PCS spectrum returned to the Commission by previous license holders. In that auction, 48 bidders claiming small business, very small business or entrepreneurial status won 272 of the 341 licenses (80%) offered. Based on this information, we conclude that the number of small broadband PCS licensees includes the 90 winning C block bidders, the 93 qualifying bidders in the D, E and F blocks, and the 48 winning bidders from Auction No. 22, for a total of 231 small-entity PCS providers as defined by the SBA and the Commission's auction rules.

157. **Narrowband PCS.** The Commission has auctioned nationwide and regional licenses for narrowband PCS. There are 11 nationwide and 30 regional licensees for narrowband PCS. The Commission does not have sufficient information to determine whether any of these licensees are small businesses within the SBA-approved definition for radiotelephone companies. At present, there have been no auctions held for the major trading area (MTA) and basic trading area (BTA) narrowband PCS licenses. The Commission anticipates a total of 561 MTA licenses and 2,958 BTA licenses will be awarded by auction. Such auctions, however, have not yet been scheduled. Given that nearly all radiotelephone companies have no more than 1,500 employees, and no reliable estimate of the number of prospective MTA and BTA narrowband licensees can be made, we assume, for our purposes here, that all of the licenses will be awarded to small entities, as that term is defined by the SBA.

²⁴⁴ *Tretdis in Telephone Service*, *supra* note 242, at Table 19.3.

²⁴⁵ See In the Matter of Amendment of Parts 20 and 24 of the Commission's Rules — Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, WT Docket No. 96-59, **Report and Order**, 11 FCC Rcd. 7824, ¶¶ 57-60 (1996); 61 FR 33859 (Jul. 1, 1996); *see also* 47 C.F.R. § 24.720(b).

²⁴⁶ *Id.* at ¶ 60

²⁴⁷ See, e.g., In the Matter of Implementation of Section 309(j) of the Communications Act—Competitive Bidding, PP Docket No. 93-253, **Fifth Report and Order**, 9 FCC Rcd. 5532, 5581-84 (1994).

²⁴⁸ FCC News, **Broadband PCS, D, E and F Block Auction Closes**, No. 71744 (rel. Jan. 14, 1997).

158. ***Rural Radiotelephone Service.*** The Commission has not adopted a definition of small entity specific to the Rural Radiotelephone Service.²⁴⁹ A significant subset of the Rural Radiotelephone Service is the Basic Exchange Telephone Radio Systems (BETRS).²⁵⁰ We will use the SBA's definition applicable to radiotelephone companies, *i.e.*, an entity employing no more than 1,500 persons.²⁵¹ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and we estimate that almost all of them qualify as small entities under the SBA's definition.

159. ***Air-Ground Radiotelephone Service.*** The Commission has not adopted a definition of small entity specific to the Air-Ground Radiotelephone Service.²⁵² Accordingly, we will use the SBA's definition applicable to radiotelephone companies, *i.e.*, an entity employing no more than 1,500 persons.²⁵³ There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and we estimate that almost all of them qualify as small under the SBA definition.

160. ***Specialized Mobile Radio (SMR).*** The Commission awards bidding credits in auctions for geographic area 800 MHz and 900 MHz *SMR* licenses to two tiers of firms: (1) "small entities," those with revenues of no more than \$15 million in each of the three previous calendar years; and (2) "very small entities," those with revenues of no more than \$3 million in each of the three previous calendar years. The regulations defining "small entity" and "very small entity" in the context of 800 MHz SMR (upper 10 MHz and lower 230 channels) and 900 MHz SMR have been approved by the SBA. The Commission does not know how many firms provide 800 MHz or 900 MHz geographic area SMR service pursuant to extended implementation authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for our purposes here, that all of the remaining existing extended implementation authorizations are held by small entities, as that term is defined by the SBA. The Commission has held auctions for geographic area licenses in the 800 MHz (upper 10 MHz) and 900 MHz *SMR* bands. There were 60 winning bidders that qualified as small and very small entities in the 900 MHz auction. Of the 1,020 licenses won in the 900 MHz auction, 263 licenses were won by bidders qualifying as small and very small entities. In the 800 MHz SMR auction, 38 of the 524 licenses won were won by small and very small entities.

161. ***Marine Coast Service.*** Between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of this auction, and for future public coast auctions, the Commission defines a "small" business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding

²⁴⁹ The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

²⁵⁰ BETRS is defined in sections 23.757 and 72.759 of the Commission's Rules, 47 C.F.R. §§ 22.757 and 22.759.

²⁵¹ 13 C.F.R. 121.201, SIC code 4812.

²⁵² The service is defined in section 22.99 of the Commission's Rules, 47 C.F.R. § 22.99.

²⁵³ 13 C.F.R. § 121.201. SIC code 4812.

three years not to exceed \$15 million dollars. A "very small" business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million dollars.²⁵⁴ There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the Commission's definition, which has been approved by the SBA.

162. Fixed Microwave Services. Microwave services include common carrier,²⁵⁵ private-operational fixed,²⁵⁶ and broadcast auxiliary radio services.²⁵⁷ At present, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For our purposes here, we will utilize the SBA's definition applicable to radiotelephone companies—*i.e.*, an entity with no more than 1,500 persons.²⁵⁸ Under this definition, we estimate that all of the Fixed Microwave licensees (excluding broadcast auxiliary licensees) would qualify as small entities.

163. Local Multipoint Distribution Service. The Commission held two auctions for licenses in the Local Multipoint Distribution Services (LMDS) (Auction No. 17 and Auction No. 23). For both of these auctions, the Commission defined a small business as an entity, together with its affiliates and controlling principals, having average gross revenues for the three preceding years of not more than \$40 million. A very small business was defined as an entity, together with affiliates and controlling principals, having average gross revenues for the three preceding years of not more than \$15 million. Of the 144 winning bidders in Auction Nos. 17 and 23, 125 bidders (87%) were small or very small businesses.

164. 24 GHz—Incumbent 24 GHz Licensees. The rules that we may later adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission has not developed a definition of small entities applicable to licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the SBA rules for the radiotelephone industry, providing that a small entity is a radiotelephone company employing fewer than 1,500 persons.²⁵⁹ The 1992 Census of Transportation, Communications and Utilities,

²⁵⁴ In the Matter of Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd. 19853 (1998).

²⁵⁵ 47 C.F.R. §§ 101 *et seq.* (formerly, part 21 of the Commission's Rules).

²⁵⁶ Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial or safety operations.

²⁵⁷ Auxiliary Microwave Service is governed by Part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. § 74 *et seq.* Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

²⁵⁸ 13 C.F.R. § 121.201, SIC code 4812

²⁵⁹ See 13 C.F.R. § 121.201, SIC code 4812

conducted by the Bureau of the Census, which is the most recent information available, shows that only 12 radiotelephone firms out of a total of 1,178 such firms that operated during 1992 had 1,000 or more employees.²⁶⁰ This information notwithstanding, we believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent and TRW, Inc.²⁶¹ Both Teligent and TRW, Inc. appear to have more than 1,500 employees. Therefore, it appears that no incumbent licensee in the 24 GHz band is a small business entity.

165. *Future 24 GHz Licensees.* The rules that we may later adopt could also affect potential new licensees on the 24 GHz band. Pursuant to 47 C.F.R. § 24.720(b), the Commission has defined “small business” for Blocks C and F broadband PCS licensees as firms that had average gross revenues of less than \$40 million in the three previous calendar years. This regulation defining “small business” in the context of broadband PCS auctions has been approved by the SBA.²⁶² With respect to new applicants in the 24 GHz band, we shall use this definition of “small business” and apply it to the 24 GHz band under the name “entrepreneur.” With regard to “small business,” we shall adopt the definition of “very small business” used for 39 GHz licenses and PCS C and F block licenses: businesses with average annual gross revenues for the three preceding years not in excess of \$15 million. Finally, “very small business” in the 24 GHz band shall be defined as an entity with average gross revenues not to exceed \$3 million for the preceding three years. The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held. Even after that, the Commission will not know how many licensees will partition their license areas or disaggregate their spectrum blocks, if partitioning and disaggregation are allowed.

166. *39 GHz.* The Commission held an auction (Auction No. 30) for fixed point-to-point microwave licenses in the 38.6 to 40.0 GHz band (39 GHz Band).²⁶³ For this auction, the Commission defined a small business as an entity, together with affiliates and controlling interests, having average gross revenues for the three preceding years of not more than \$40 million. A very small business was defined as an entity, together with affiliates and controlling principals, having average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these definitions.²⁶⁴ Of the 29 winning bidders in Auction No. 30, 18 bidders (62%) were small business participants.

167. *Multipoint Distribution Service (MDS).* This service involves a variety of transmitters, which are used to relay data and programming to the home or office, similar to that

²⁶⁰ 1992 Census at Firm Size 1-123.

²⁶¹ Teligent has acquired the DEMS licenses of FirstMark, the only other licensee in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

²⁶² See In the Matter of Implementation of Section 309(j) of the Communications Act—Competitive Bidding, *Fifth Report and Order*, 9 FCC Rcd. 5532, 5581-82 ¶ 115 (1994).

²⁶³ See 39 GHz Band Auction Closes; Winning Bidders of 2,173 Licenses Announced, *Public Notice*, DA 00-1035 (rel. May 10, 2000).

²⁶⁴ See Letter to Kathleen O'Brien Ham, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator, SBA (filed Feb. 4, 1998).

provided by cable television systems.²⁶⁵ In connection with the 1996 MDS auction, the Commission defined small businesses as entities that had annual average gross revenues for the three preceding years not in excess of \$40 million.²⁶⁶ This definition of a small entity in the context of MDS auctions has been approved by the SBA.²⁶⁷ These stations were licensed prior to implementation of Section 309(j) of the Communications Act of 1934, as amended.²⁶⁸ Licenses for new MDS facilities are now awarded to auction winners in Basic Trading Areas (BTAs) and BTA-like areas.²⁶⁹ The MDS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 BTAs. Of the 67 auction winners, 61 meet the definition of a small business.

168. MDS is also heavily encumbered with licensees of stations authorized prior to the MDS auction. SBA has developed a definition of small entities for pay television services, which includes all such companies generating \$11 million or less in annual receipts.²⁷⁰ This definition includes MDS systems, and thus applies to incumbent MDS licensees and wireless cable operators which may not have participated or been successful in the MDS auction. Information available to us indicates that there are 832 of these licensees and operators that do not generate revenue in excess of \$11 million annually. Therefore, for purposes of this analysis, we find there are approximately 892 small MDS providers as defined by the SBA and the Commission's auction rules.

169. *Offshore Radiotelephone Service.* This service operates on several UHF TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico.²⁷¹ At present, there are approximately 55 licensees in this service. We are unable at this time to estimate the number of licensees that would qualify as small under the SBA's definition for radiotelephone communications.

170. *Wireless Communications Services (WCS).* This service can be used for fixed, mobile, radio-location and digital audio broadcasting satellite uses. The Commission defined "small business" for the WCS auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The Commission auctioned

²⁶⁵ For purposes of this item, MDS includes both the single channel Multipoint Distribution Service (MDS) and the Multichannel Multipoint Distribution Service (MMDS).

²⁶⁶ 47 C.F.R. § 1.2110(a)(1).

²⁶⁷ In the Matter of Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service; Implementation of Section 309(j) of the Communications Act—Competitive Bidding, MM Docket No. 94-131, PP Docket No. 93-253, *Report and Order*, 10 FCC Rcd. 9589 (1995), 60 FR 36524 (Jul. 17, 1995).

²⁶⁸ 47 U.S.C. § 309(j).

²⁶⁹ *Id.* A Basic Trading Area (BTA) is the geographic area by which the Multipoint Distribution Service is licensed. See RAND McNALLY, 1992 COMMERCIAL ATLAS AND MARKETING GUIDE 36-39 (123rd ed. 1992).

²⁷⁰ 13 C.F.R. 9121.201.

²⁷¹ This service is governed by subpart I of Part 22 of the Commission's Rules. See 47 C.F.R. §§ 22.1001-22.1037.

geographic area licenses in the WCS service. In the auction, there were seven winning bidders that qualified as very small business entities, and one winning bidder that qualified as a small business entity. We conclude that the number of geographic area **WCS** licensees affected includes these eight entities.

171. **General Wireless Communication Service (GWCS)** This service was created by the Commission on July 31, 1995²⁷² by transferring 25 MHz of spectrum in the 4660-4685 MHz band from the federal government to private sector use. The Commission sought and obtained SBA approval of a refined definition of "small business" for GWCS in this band.²⁷³ According to this definition, a small business is any entity, together with its affiliates and entities holding controlling interests in the entity, that has average annual gross revenues over the three preceding years that are not more than \$40 million.²⁷⁴ By letter dated March 30, 1999, **NTIA** reclaimed the spectrum allocated to GWCS and identified alternative spectrum at 4940-4990 MHz. On February 23, 2000, the Commission released its **Notice of Proposed Rulemaking** in WT Docket No. 00-32 proposing to allocate and establish licensing and service rules for the 4.9 GHz band.²⁷⁵

4. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

172. There are certain transaction costs for terminating access, including measuring and billing. Under the existing CPNP regime, the terminating LEC bills the originating network, whereas under bill and keep, the terminating LEC may bill its own customers. In this **NPRM**, we seek comment on the relative transaction costs of each proposal, weighed against the other efficiencies of the various alternatives.²⁷⁶ We note that transaction costs can increase under a bill-and-keep arrangement, for example, since each carrier may be responsible for measuring and billing its own customers for all traffic, rather than merely measuring and billing the originating carrier.

173. Apart from the transaction costs for termination, this **NPRM** more broadly suggests that a new regime could free regulators from allocating transport costs, and from setting the level and structure of termination rates.²⁷⁷ Where rates had once been set by regulation, individual carriers, including small entities, could inherit this responsibility.

174. As a result of rules that we may adopt, incumbent LECs and CLECs may be required to discern the amount of traffic carried on their networks that is bound for ISPs.

²⁷² See In the Matter of Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, ET Docket No. **94-32**, **Second Report and Order**, 11 FCC Rcd. 624 (1995).

²⁷³ See Letter to Daniel B. Phythyon, Chief, Wireless Telecommunications Bureau, FCC, from Aida Alvarez, Administrator. SBA (filed May 19, 1998).

²⁷⁴ See 47 C.F.R. § 26.4.

²⁷⁵ See In the Matter of the 4.9 GHz Band Transferred From Federal Government Use, WT Docket No. 00-32, **Notice of Proposed Rulemaking**, 15 FCC Rcd. 4778 (2000).

²⁷⁶ See *supra* ¶ 51.

²⁷⁷ See *supra* ¶¶ 56-57.

In addition, such incumbent LECs and competitive entrants may be required to produce information regarding the costs of carrying ISP-bound traffic on their networks.²⁷⁸

175. In this *NPRM*, we seek comment on the extent to which a new regime would comply with our reciprocal compensation obligations regarding traffic balances and symmetrical rates.²⁷⁹ If we adopt rules on this issue, we may require carriers to report traffic imbalances, corresponding to rate symmetry. This is especially true in the context of LEC-CMRS interconnection, in which we seek comment on the feasibility of cost studies that CMRS carriers could use to justify separate treatment.²⁸⁰

5. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

176. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.²⁸¹

177. Although the transaction costs for terminating access can increase under a bill-and-keep arrangement, the impact on small entities would be minimal since measuring and billing is already a fundamental component of their operations. Furthermore, the advantages of a bill-and-keep regime, in providing clearer demarcations of cost between carriers, appear to outweigh the minimal increase in transaction costs that could occur under bill and keep. With regard to the related task of allocating transport costs, the same reasoning applies to small entities in that the clearer demarcations between carriers inherent in bill and keep outweighs the potential burden of setting the level and structure of termination rates. We note, in any case, that many small entities are competitive entrants such as CLECs, which currently enjoy specific exemptions from ILEC rate regulation.

178. We also note a potential benefit that may accrue to small-entity LECs transporting ISP-bound traffic. As discussed above, we may adopt rules that may require incumbent LECs and CLECs to discern the amount of traffic carried on their networks that is bound for ISPs. We anticipate that if we adopt such rules, incumbent LECs and CLECs, including small-entity incumbent LECs and CLECs, will be able to receive compensation for the delivery of ISP-bound traffic that they might not otherwise receive. The *NPRM* separately requests comment on alternative proposals.

²⁷⁸ See *infra* ¶ 178.

²⁷⁹ See *supra* ¶¶ 73-77.

²⁸⁰ See *supra* ¶¶ 90-96.

²⁸¹ 5 U.S.C. § 603(c).

179. In the *NPRM*, we seek comment on the issue of asymmetrical compensation for unbalanced traffic. Although small entities could experience an increase in reporting and recordkeeping when submitting cost studies to this effect, if adopted, we note that such a requirement would more accurately serve the revenue requirements of small entities in relation to larger competitors.

180. Finally, in the *NPRM*, we seek comment on additional impacts on small entities that may result from any new intercarrier compensation regime.” When seeking comment on the alternative of contractual arrangements for intercarrier compensation, we ask commenters to address the potential impacts of such a market-based approach on small entities, such as the refusal to carry traffic.²⁸³

6. Federal Rules that May Duplicate, Overlap or Conflict With the Proposed Rules

181. None.

B. Comment Filing Procedures

182. Pursuant to sections 1.415, 1.419, and 1.430 of the Commission’s rules, 47 C.F.R. §§ 1.415, 1.419, 1.430, interested parties may file comments within 90 days after publication in the Federal Register, and reply comments within 135 days after publication in the Federal Register. All filings should refer to CC Docket No. 01-92. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS) or by filing paper copies.²⁸⁴ Comments filed through the ECFS can be sent as an electronic file via the Internet to <<http://www.fcc.gov/e-file/ecfs.html>>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket number, which in this instance is CC Docket No. 01-92. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to <ecfs@fcc.gov>, and should include the following words in the body of the message: “get form <your e-mail address>.” A sample form and directions will be sent in reply.

183. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission’s Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, Room TW-B204, 445 12th Street, S.W., Washington, D.C. 20554. Regardless of whether parties choose to file electronically or by paper, parties should also serve: (1) Paul Moon, Common Carrier Bureau, 445 12th Street, S.W., Room 3-C423, Washington, D.C. 20554; (2) Jane Jackson, Common Carrier Bureau, 445 12th Street, S.W., Room 5-A225, Washington, D.C. 20554; and (3) the Commission’s copy contractor, International Transcription Service, Inc. (ITS), 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, (202) 857-3800, with copies of any documents filed

²⁸² See *supra* Section III.D.6.

²⁸³ See *supra* ¶ 130.

²⁸⁴ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24121 (1998).

in this proceeding. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554.

184. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to Wanda Harris, Common Carrier Bureau, **445** 12th Street, S.W., Room 5-A452, Washington, D.C. 20554. Such a submission should be on a 3.5-inch diskette formatted in a Windows-compatible format using Microsoft Word or compatible software. The diskette should be accompanied by a cover letter and should be submitted in “read only” mode. The diskette should be clearly labeled with the commenter’s name, proceeding (including the docket number—in this case, CC Docket No. 01-92), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase: “Disk Copy—Not an Original.” Each diskette should contain only one party’s pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission’s copy contractor, International Transcription Service, Inc., 1231 20th Street, N.W., Washington, D.C. 20036.

185. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with section 1.49 and all other applicable sections of the Commission’s **rules**.²⁸⁵ We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage that parties track the organization set forth in this *NPRM* to facilitate our internal review process.

186. Pursuant to 47 C.F.R. § 1.200(a), which permits the Commission to adopt modified or more stringent *ex parte* procedures in particular proceedings if the public interest so requires, we announce that this proceeding will be governed by “permit-but-disclose” *ex parte* procedures that are applicable to non-restricted proceedings under 47 C.F.R. § 1.1206. Designating this proceeding as “permit-but-disclose” will provide an opportunity for all interested parties to receive notice of the various technical, legal, and policy issues raised in *ex parte* presentations made to the Commission in the course of this proceeding. This will allow interested parties to file responses or rebuttals to proposals made on the record in this proceeding. Accordingly, we find that it is in the public interest to designate this proceeding as “permit-but-disclose.”

187. Parties making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one or **two** sentence description of the views and arguments presented is generally required. *See* 47 C.F.R. § 1.1206(b)(2), as revised. Other rules pertaining to oral and written presentations are set forth in Section 1.206(b) as well. Interested parties are to file any written *ex parte* presentations in this proceeding with the Commission Secretary, Magalie Roman Salas, 445 12th Street, S.W., TW-B204, Washington, D.C. 20553, and serve with copies: (1) Paul Moon, Common Carrier Bureau, 445 12th Street,

²⁸⁵ See 47 C.F.R. § 1.49.

S.W., Room 3-C423, Washington, D.C. 20554; (2) Jane Jackson, Common Carrier Bureau, 445 12th Street, S.W., Room 5-A225, Washington, D.C. 20554; and (3) International Transcription Service, Inc. (ITS), 445 12th Street, S.W., Room CY-B402, Washington, D.C. 20554, (202) 857-3800.

188. Because many of the matters on which we request comment in this NPRM may call on parties to disclose proprietary information such as market research and business or technical plans, we suggest that parties consult 47 C.F.R. § 0.459 about the submission of confidential information.

189. Alternative formats (computer diskette, large print, audio recording, and Braille) are available to persons with disabilities by contacting Brian Millin at (202) 418-7426 voice, (202) 418-7365 TTY, or <bmillin@fcc.gov>. This NPRM can also be downloaded in Microsoft Word and ASCII formats at <<http://www.fcc.gov/ccb/cpd>>.

V. ORDERING CLAUSES

190. Accordingly, IT IS ORDERED that, pursuant to authority contained in sections 4, 201-202, 303 and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154, 201-202, 303 and 403, and sections 1.1, 1.411 and 1.412 of the Commission's rules, 47 C.F.R. §§ 1.1, 1.411 and 1.412, this NPRM IS ADOPTED.

191. IT IS FURTHER ORDERED that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this NPRM, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

**SEPARATE STATEMENT OF
CHAIRMAN MICHAEL K. POWELL**

*Re: Notice of Proposed Rulemaking, Developing a Unified Inter-carrier Compensation Regime
(CC Docket No. 01-92)*

I am immensely proud of the Commission and our staff for initiating this proceeding, in which we will explore whether and how we can rationalize the disparate compensation arrangements between carriers and other companies for traffic that traverses the public switched telephone network.

Since I arrived at the Commission, I have been known to talk about the public switched telephone network as the hub of a wheel, the spokes being the many companies (*e.g.*, paging companies, wireless carriers, ISPs, long distance carriers) that interconnect with and pass traffic to and from the wireline telephone network. As all regulators and businesses know, however, the rates for interconnecting with the phone network vary depending on the type of company that is doing the interconnecting. In a competitive environment, this leads to arbitrage and inefficient entry incentives, as companies try to interconnect at the most attractive rates. I support this *Notice* because it seeks comment on how we can make these varied inter-carrier compensation regimes more consistent with each other and, thus, with competition.

In endorsing this *Notice* regarding inter-carrier compensation, I should underscore that I consider this action to be part and parcel with two other items: first, the Order on remand that the Commission hopes to adopt in the next few days regarding reciprocal compensation for Internet-bound traffic; and second, the soon-to-be-adopted Order regarding how much CLECs can tariff and charge long distance companies in access charges. In all three of these proceedings, the Commission has demonstrated its willingness to tackle complex and often intractable pricing-related issues while, when appropriate, giving carriers a transition period to adjust to new compensation regimes.

I (and much of the CLEC industry) would have preferred that we adopt all three of these items at the same time, since they are inter-related. But because of the intricacies of both the issues and our internal deliberations, we have a few loose ends to tie up regarding CLEC access charges and reciprocal compensation. With the cooperation of my colleagues, however, I am very hopeful that we can finish those deliberations quickly, such that all three items can be finalized and released in the next few days.

In closing, I would note that these actions, which are the products of intense and long discussions and which will take years to implement, are hardly precipitous. They are, nonetheless, critical to the continued development of economically efficient and sustainable competition in telecommunications. Thus, I **applaud my** colleagues **and our able** staff for their courage and hard **work** in addressing these issues in a meaningful, albeit gradual, manner.

**SEPARATE STATEMENT OF
COMMISSIONER SUSAN NESS**

***Re: Notice of Proposed Rulemaking, Developing a Unified Intercarrier Compensation Regime
(CC Docket No. 01-92)***

In the five years since passage of the Telecommunications Act of 1996, we have taken significant steps to adapt to the changing marketplace the payments made from one carrier to another for the exchange of traffic. We have begun, although not yet completed, efforts to identify and make explicit the subsidies embedded in intercarrier payments. And we have modified rate structures so that payments more accurately reflect costs and the manner in which those costs are incurred. Our goal in all of these measures has been to reduce distortions in the marketplace that serve as impediments to competition.

Each of these incremental actions, however, addressed problems with a specific intercarrier compensation mechanism. Yet, we still have in place today a system under which the amounts, and even the direction, of payments vary depending on whether the carrier routes the traffic to a local carrier, a long-distance carrier, an Internet provider, or a CMRS or paging provider. In an era of convergence of markets and technologies, this patchwork of regimes no longer makes sense. What had been a historical artifact may have become an unsustainable anomaly.

Today's proceeding gives us an opportunity to take a fresh look at these various regimes and consider actions to harmonize the different payment structures. We should not underestimate the complexity of this undertaking. Even were we writing on a clean slate, this proceeding would present a daunting challenge. We must now also take account of the historical structure and the business plans and expectations that have been created by those regimes. We must also resist merely applying legacy regimes to new services. Although it is not clear that a "one-size-fits-all" approach to intercarrier compensation is warranted, our goal must be a consistent and rational system that relies to the greatest extent possible on market forces—and not the possibility of arbitrage created by different payment structures—to drive technological advances and innovation. If we are successful in our efforts to eliminate barriers to competition, consumers will reap the benefits—more choice, improved services, and lower prices.

At the same time, I urge the Commission to remain mindful of the implications of our actions on those living in rural and other high-cost areas. We must take heed to preserve the third pillar of the Telecommunications Act of 1996—universal service. Consumers will only benefit when we establish an economically rational, competitively neutral, explicit mechanism that will promote the Act's goals of competition, deregulation, and universal service.

**SEPARATE STATEMENT OF
COMMISSIONER HAROLD FURCHTGOTT-ROTH**

*Re: Notice of Proposed Rulemaking, Developing a Unified Intercarrier Compensation Regime
(CC Docket No. 01-92)*

This NPRM seeks comment on a variety of pricing mechanisms for commercial relationships between and among carriers, placing particular emphasis on bill-and-keep arrangements. Such mechanisms are worthy of praise when they are employed voluntarily and by mutual assent in contracts. This NPRM thus may do some good in informing the public of various contractual options, expanding and illuminating the range of pricing mechanisms that carriers can agree to adopt.

If, however, the goal of the NPRM is ultimately to limit the range of permissible contractual arrangements private parties may undertake, this is a sad and shameful day for the Commission. We would be telling private parties that Washington knows how to improve their lot better than they do themselves. We would be mandating an invasive form of nationwide price regulation, a great irony at a time when politicians of all stripes embraces the ideals of economic deregulation.

The Communications Act of 1934, as amended by the Telecommunications Act of 1996 ("1996 Act"), does not require the Commission to regulate the prices charged between and among carriers. Indeed, the entire elaborate framework of Sections 251 and 252 of the 1996 Act is predicated on the primacy of contracts between private parties, not rate regulation from Washington, D.C. *See* 47 U.S.C. §§ 251-252.

Moreover, the 1996 Act explicitly aims to remove impediments to contract. For example, section 252 limits the grounds on which State commissions may reject privately negotiated intercarrier agreements. *See* 47 U.S.C. § 252(e)(2)(A). In addition, section 253(a) prohibits barriers to entry—which necessarily include foreclosing options to contract between private parties: "No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." 47 U.S.C. § 253(a). These provisions make unlawful many forms of price regulation that limit the scope of contracts between and among carriers. While the focus of these provisions is primarily upon State and local governments, the federal government should be slow to adopt regulation that State or local governments cannot legally impose.

Allowing and encouraging freedom of contract is profoundly important. As Milton and Rose Friedman explain in *Free To Choose*:

One set of ideas was embodied in *The Wealth of Nations*, the masterpiece that established the Scotsman Adam Smith as the father of modern economics. It analyzed the way in which a market system could combine the freedom of individuals to pursue their own objectives with the extensive cooperation and collaboration needed in the economic field to produce our food, our clothing, our housing. Adam Smith's key insight was that both parties to an exchange can

benefit and that, *so long as cooperation is strictly voluntary*, no exchange will take place unless both parties do benefit. No external force, no coercion, no violation of freedom is necessary to produce cooperation among individuals all of whom can benefit. That is why, as Adam Smith put it, an individual who “intends only his own gain” is “led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good.”

Milton & Rose Friedman, *Freedom To Choose* 1-2 (1980) (quoting Adam Smith, *The Wealth of Nations* (1776)).

Two lessons relevant to this proceeding can be drawn from the Friedmans’ essay. First, limiting the scope of potential contracts among carriers, or coercing the terms of such contracts, cannot advantage all carriers; indeed, it will certainly harm some carriers relative to no limitations on contracts. Second, the unfettered pursuit of private interest, including through contracts, will lead to greater social welfare gains than the intentional, including governmental, efforts to promote welfare. Stated simply, contracts, rather than government regulation, are the surest way to promote the public interest.

Requiring intercarrier compensation of specific forms, such as bill-and-keep, is nothing more than price regulation—harmful to contracts, carriers, consumers, and the public at large. No amount of studies or documents can paper over that simple fact. Indeed, the burden should be on proponents of new forms of price regulation and new forms of contract foreclosure to demonstrate that such regulation promotes public welfare more than contractual flexibility. I await such demonstrations.

For its entire history, the Commission has regulated telecommunications rates with a heavy, clumsy, at times sadistic, and all too visible hand. Limiting voluntary contracts among private parties, or coercing the terms of such contracts, cannot promote the public interest. I hope that this proceeding will afford the public an opportunity to provide comments to the Commission on the legacy of Commission rate regulation and its substantial unintended harms. Perhaps it is time for the Commission to promote both the reality as well as the rhetoric of deregulation.